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| APPLICATION NO.  | FILING DATE       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|--|-------------------|----------------------|-------------------------|------------------|--|
| 09/966,109   | 10/01/2001        | Cordula Hopmann      | 02481.1751              | 4743             |  |
| 75   | 590 02/04/2003    |                      |                         |                  |  |
|  | nderson, Farabow, |                      | EXAM                    | EXAMINER         |  |
| Garrett & Dunner, L.L.P.<br>1300 I Street, N.W.<br>Washington, DC 20005-3315 |                   |                      | PESELE                  | PESELEV, ELLI    |  |
|  |                   |                      | ART UNIT                | PAPER NUMBER     |  |
|  |                   |                      | 1623                    | $\sim$           |  |
|  |                   |                      | DATE MAILED: 02/04/2003 | 6                |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Amplicant(a)  |
|--|---|---|
|  | Application No.   | Applicant(s)  |
| Office Action Summon   | 09/966,109  | HOPMANN ET AL.  |
| Office Action Summary  | Examiner  | Art Unit  |
| TI MAU INO DATE - CUI  | Elli Peselev  | 1623  |
| The MAILING DATE of this communication a<br>Period for Reply   | appears on the cover sheet w  | ith the correspondence address  |
| A SHORTENED STATUTORY PERIOD FOR REITHE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a If NO period for reply is specified above, the maximum statutory per Failure to reply within the set or extended period for reply will, by state - Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).  Status | N. R 1.136(a). In no event, however, may a reply within the statutory minimum of thir riod will apply and will expire SIX (6) MON atute, cause the application to become Al | reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). |
| 1) Responsive to communication(s) filed on 6   | 02 January 2003   |   |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑  | This action is non-final.   |   |
| 3) Since this application is in condition for allo closed in accordance with the practice und  |   |   |
| Disposition of Claims  |   |   |
| 4)⊠ Claim(s) <u>1-22</u> is/are pending in the applicat  |   |   |
| 4a) Of the above claim(s) is/are without   | drawn from consideration.   |   |
| 5) Claim(s) is/are allowed.  | ,   |   |
| 6)⊠ Claim(s) <u>1-22</u> is/are rejected.  |   |   |
| 7) Claim(s) is/are objected to.  | •   |   |
| 8) Claim(s) are subject to restriction and   | d/or election requirement.  |   |
| Application Papers  9) ☐ The specification is objected to by the Exam  | ·   | •   |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ ac  |   | the Eveniner  |
| Applicant may not request that any objection to  | •   |   |
| 11) The proposed drawing correction filed on   |   |   |
| If approved, corrected drawings are required in  |   | adapproved by the Examiner.   |
| 12) The oath or declaration is objected to by the  | • •   |   |
| Priority under 35 U.S.C. §§ 119 and 120  |   |   |
| 13) Acknowledgment is made of a claim for fore   | eian priority under 35 U.S.C.   | 8 119(a)-(d) or (f)   |
| a) ☐ All b) ☐ Some * c) ☐ None of:   | and the control of the control  | 3 (a) (b) (c)   |
| 1. Certified copies of the priority docume   | ents have been received   |   |
| 2. Certified copies of the priority docume   |   | application No  |
| 3. ☐ Copies of the certified copies of the p   | oriority documents have been  | ··  |
| application from the International  * See the attached detailed Office action for a l  |   | received.   |
| 14) Acknowledgment is made of a claim for dome   | estic priority under 35 U.S.C.  | § 119(e) (to a provisional application).  |
| a) The translation of the foreign language   | · · · · · · · · · · · · · · · · · · ·   |   |
| Attachment(s)  | osto priority dridor oo o.o.o.  | . 33 120 0110/01 121.   |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s   | 5) Notice of  | Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)   |

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35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 22 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 22, as written, does not sufficiently distinguish over Streptomyces species ST 101396 as it exists naturally because the claim does not particularly points out any non-naturally occurring differences between the claimed product and the naturally occurring products. In the absence of the hand of man, the naturally occurring product is considered non- statutory subject matter. See Diamond v. Chakrabarty, 447 U.S. 303, 206 USPQ 193 (1980).

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-22 rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a credible asserted utility or a well established utility.

The specification on page 1 states that the claimed compounds have affinity for neurotensin receptors and that some studies have suggested the involvment of neurotensin in schizophrenia, Parkinson's disease and Alzheimer's disease. The specification further states that the claimed compounds are expected to be useful in the treatment of said diseases. The statement that the claimed compounds are expected to be useful for the treatment of diseases set forth is a mere speculation. There is no known correlation between the compounds with affinity for neurotensin receptors and

the compounds useful in the treatment of schizophrenia, Parkinson's disease and Alzheimer's disease or any other disease.

Claims 1-22 are also rejected under 35 U.S.C. 112, first paragraph. Specifically, since the claimed invention is not supported by either a credible asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.

Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for citrullimycines, does not reasonably provide enablement for derivatives of citrullimycines. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The term "derivatives" encompasses a large number of compounds having different structural fotmulas and it would take an undue amount of experimentation to determine which specific compounds will be useful in the instant invention.

The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to provide assurance of permanent availability of the culture to the public through a depository.

It appears that the practice of this invention requires the use of a microorganism belonging to Streptomyces species ST 101396. While it is noted that a deposit has been made with the German Collection of Microorganisms and Cell Cultures, there is no assurance that all restrictions on the availability of this strain will be revoked upon the issuance of a U.S. patent based on this application.

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Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, for the reasons set forth in the above objection to the specification.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "derivative" (all occurrences) renders the claims indefinite in that it cannot be determined what is encompassed by said terminology. In has been noted that the specification states on pages 9-10 that chemical equivalents ('derivatives') of the compounds according to the invention include compounds derived from a compound of the formula (I) that retain the activity displayed by the compounds of the invention and include esters, ethers, complexes or adducts. However, note that the defination of the derivatives set forth in the specification is not limited to esters, ethers, complexes and adducts.

The term "comprise" renders claims 3-5 indefinite because in leaves the structural formula of the compound open-ended.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 22 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Grabley et al (U.S. Patent No. 5,252,472).

Grabley et al disclose a microorganism belonging to Streptomycetes species.

The instant specification fails to provide a description of the claimed species.

Therefore, it cannot be ascertained if there are any differences between the claimed species and the prior art species.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elli Peselev whose telephone number is 703-308-4616. The examiner can normally be reached on weekdays 8.30 a.m. - 5.00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 703-308-4624. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

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308-4556 for regular communications and 703-308-4556 for After Final

communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

Elli Peselev January 31, 2003

> ELLI PESELEV PRIMARY EXAMINER GROUP 1200

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